

UNAPPROVED PARTS NOTIFICATION

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20
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U.S. Department
of Transportation
**Federal Aviation
Administration**

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AFFECTED PRODUCT

Lycoming engines.

PURPOSE

The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts distributors regarding improper aircraft engine maintenance performed on Lycoming aircraft engines.

BACKGROUND

Information received during a Federal Aviation Administration (FAA) suspected unapproved parts investigation revealed that Larry Good (Good Aviation, 1705 Smoking Tree Street, Moore, OK 73160-5725) improperly approved for return to service Lycoming engines used on general aviation aircraft. The investigation revealed numerous discrepancies when the engines were returned to service, contrary to Title 14 of the Code of Federal Regulations, Part 43. Larry Good approved the engines for return to service under Mechanic Certificate – Airframe and Powerplant ratings, and Inspection Authorization (IA) No. 1922744.

Listed below are some of the noted discrepancies:

- Use of scrap parts marked “NOT AIRWORTHY” and parts with identification data removed in the repair and overhaul of engines.
- Falsified logbook entries stating that “new” pistons and piston pins had been installed when, in fact, the parts were used.
- Falsification of return-to-service tags and engine maintenance logbook entries.
- Use of replacement parts that extended their use beyond the manufacturers’ service limits.
- Repairs and overhauls carried out without acceptable or approved data.
- Engines approved for return to service that were not in compliance with applicable Airworthiness Directives or not in accordance with applicable service bulletins (e.g., use of incorrect fuel line clamps, failure to replace oil pump housings and gears, failure to replace thermostatic bypass valve seats, failure to modify crankcase gears, or installation of incorrect camshafts).
- Unauthorized replacement of identification plates.
- Approval of incomplete engines for return to service.
- Installation of wrong-size main bearings.
- Installation of incorrect engine cylinders.

RECOMMENDATIONS

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, maintenance organizations, parts suppliers, and distributors should inspect their aircraft,

aircraft records, and/or parts inventories for engines approved for return to service by Larry Good. If any of these engines are installed or found in existing stock, you should:

- Inspect the engine parts and components for conformity.
- Inspect the validity of engine logbook entries, return-to-service tags, invoices, and other documentation associated with engine parts and accessories.
- Report any evidence of engine failure, premature accessory failure, low cylinder compression, burnt valves, piston failure, metal in the oil screen, overheating, or other improper maintenance to the FAA Flight Standards District Office (FSDO) given below.

FURTHER INFORMATION

Further information concerning this investigation and guidance regarding the above-referenced engines may be obtained from the FSDO given below. In addition to the above recommendations, the FAA would appreciate any information concerning the discovery of the engines, the means used to identify the source, and the action taken to remove the engines from service.

This notice originated from the Oklahoma City FSDO, 1300 S. Meridian, Suite 601, Oklahoma City, OK 73108, telephone (405) 951-4200, fax (405) 951-4282; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 668- 3720, fax (703) 481-3002.